

Date: Monday, 2/27/2006 4:22:06 PM  
 User: Kim Johnston

## Process Sheet

<b>Customer</b> : CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> : SADDLE FITTING, FWD (OUTBOARD/INBOARD)
<b>Job Number</b> : 25996	
<b>Estimate Number</b> : 10530	
<b>P.O. Number</b> : N/A	<b>Part Number</b> : D2571
<b>This Issue</b> : 2/27/2006 <b>S.O. No.</b> : N/A	<b>Drawing Number</b> : D2571 REV E
<b>Prsht Rev.</b> : NC	<b>Project Number</b> : N/A
<b>First Issue</b> : N/A <b>Type</b> : MACHINED PARTS	<b>Drawing Revision</b> : E
<b>Previous Run</b> : 25897	<b>Material</b> : N/A
<b>Written By</b> : <u>SEE COMMENT BELOW</u>	<b>Due Date</b> : 3/20/2006 <b>Qty:</b> 8 <b>Um:</b> Each
<b>Checked &amp; Approved By</b> : <u>KJ 06.02.28</u>	
<b>Comment</b> : Est: 1 02.10.02 Re-format; Change to Dwg Rev. D & incorporated D2572KJ	

## Additional Product

Job Number:



<b>Seq. #:</b>	<b>Machine Or Operation:</b>	<b>Description :</b>
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1.0	D6101007	7075-T7351 8.25X7.75X2.5
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**Comment:** Qty.: 1.0000 Each(s)/Unit Total : 8.0000 Each(s)

7075-T7351 8.25X7.75X2.5

Make from D6101-007 billet for D2571

Ensure that grain is along 7.75" length

Batch No: B24893

(8)

J.G

06/03/25

8

2.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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**Comment:** HAAS CNC VERTICAL MACHINING #1Program Batch No. 25996 Double check by: SN

1-Machine Step No 1 per Folio FA051 and inspect per attached Dimension Sheets

2-Machine Step No 2 per Folio FA051 and inspect per attached Dimension Sheets

3-Machine Step No 3 per Folio FA051 and inspect per attached Dimension Sheets

4-Deburr and remove all machining marks

5-Tumble to remove sharp edges.

06/03/25  
 J.G

06/03/25

8

3.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
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**Comment:** CONVENTIONAL MILLING MACHINE

Machine keyway as per dwg D2571 &amp; D2572

06/03/27  
 J.G

06/03/27 8

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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**Comment:** INSPECT PARTS AS THEY COME OFF MACHINE

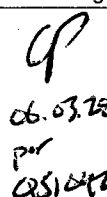
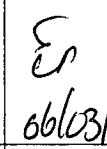
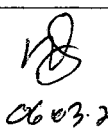
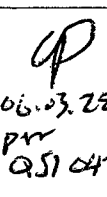

06/03/27  
 J.G

06/03/27 8

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☐ No ☒ DQA: ☒ Date: 06/04/04  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
0603/28	2.1	R2.000 Dimension ("A1") is R1.991 0.125" dimension ("W") is 0.118" on one part	 06.03.28 per QSI 042	Correcting R2.000 dimension would result in well that is too thin - see DS email.  SCRAP PART. and Replace	 06/03/28	 0603/28	 06.03.28 per QSI 042	 0603/28

NOTE: Date & initial all entries

Date: Monday, 2/27/2006 4:22:06 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE FITTING, FWD (OUTBOARD/INBOARD)

Job Number: 25996

Part Number: D2571

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

*mk 06/03/29*

8

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

*a.m 06-03-29*

(8)

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

*DL 06/04/02*

(8)

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

*DL 6/4/3*

(8)

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: *728*

*DL 6/4/3*

(8)

10.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

*DL 06/04/04*

(8)

Job Completion



*DL 06/04/04*

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	<b>25996</b>
<b>Description:</b> Saddle, Fwd Outboard	<b>Part Number:</b>	<b>D2571</b>
<b>Inspection Dwg:</b> D2571 Rev. E		<b>Page 1 of 1</b>

Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443	DT8682	0.438	0.438	0.438	0.438		
B	1.745	1.755		1.747	1.745	1.745	1.745		
C	3.495	3.505		3.499	3.495	3.495	3.495		
D	1.745	1.755		1.747	1.745	1.745	1.745		
E	7.990	8.010		8.004	8.005	8.005	8.006		
F	0.490	0.510		0.501	0.497	0.500	0.496		
G	0.257	0.262	DT8683	0.257	0.257	0.257	0.257		
H	0.375	0.380	DT8684	0.375	0.375	0.375	0.375		
I	0.490	0.510		0.498	0.501	0.500	0.501		
J	1.174	1.184		1.177	1.177	1.177	1.177		
K	0.558	0.578		0.568	0.565	0.564	0.566		
L	1.174	1.184		1.177	1.177	1.177	1.177		
M	1.490	1.500		1.494	1.495	1.494	1.495		
N	2.495	2.505		2.499	2.496	2.496	2.498		
O	3.869	3.879		3.873	3.872	3.871	3.872		
P	0.115	0.135		0.122	0.130	0.126	0.129		
Q	0.115	0.135		0.122	0.130	0.130	0.130		
R	0.240	0.260		0.250	0.254	0.252	0.254		
S	0.115	0.135		0.125	0.126	0.125	0.126		
T	0.178	0.198		0.188	0.188	0.188	0.188		
U	2.940	2.980		2.966	2.960	2.960	2.966		
V	0.230	0.250		0.240	0.245	0.246	0.247		
W	0.115	0.135		0.125	0.118	0.118	0.118		
X	0.308	0.313		0.310	0.310	0.310	0.310		
Y	0.760	0.765		0.760	0.760	0.760	0.760		
Z	0.352	0.372		0.360	0.360	0.360	0.360		
AA	0.470	0.530		0.500	0.500	0.500	0.500		
AB	0.615	0.635		0.624	0.628	0.625	0.625		
AC	0.053	0.073		0.063	0.063	0.063	0.063		
AD	0.240	0.260		0.250	0.254	0.252	0.250		
AE	1.375	1.395		1.387	1.386	1.390	1.393		
AF	0.115	0.135		0.122	0.130	0.130	0.130		
AG	0.240	0.280		0.260	0.260	0.260	0.260		
AH	0.240	0.260		0.244	0.256	0.254	0.251		
AI	2.000	2.020		2.000	2.002	2.002	2.002		
AJ	0.023	0.043		0.033	0.030	0.030	0.030		
Accept/Reject									

Measured by:	J. G. / Cr
Date:	06/03/28

Audited by:	T. K.
Date:	06/03/29

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	<b>25996</b>
<b>Description:</b> Saddle, Fwd Outboard	<b>Part Number:</b>	<b>D2571</b>
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F	0.490	0.510		0.502	0.499	0.499	0.499		
G	0.257	0.262	DT8683	0.257	0.257	0.257	0.257		
H	0.375	0.380	DT8684	0.375	0.375	0.375	0.375		
I	0.490	0.510		0.498	0.502	0.502	0.500		
J	1.174	1.184		1.177	1.177	1.177	1.178		
K	0.558	0.578		0.564	0.565	0.567	0.564		
L	1.174	1.184		1.177	1.177	1.177	1.178		
M	1.490	1.500		1.496	1.495	1.495	1.495		
N	2.495	2.505		2.498	2.496	2.497	2.495		
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P	0.115	0.135		0.128	0.130	0.128	0.128		
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T	0.178	0.198		0.188	0.188	0.188	0.188		
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X	0.308	0.313		0.310	0.310	0.310	0.310		
Y	0.760	0.765		0.760	0.760	0.760	0.760		
Z	0.352	0.372		0.368	0.368	0.365	0.368		
AA	0.470	0.530		0.500	0.500	0.500	0.500		
AB	0.615	0.635		0.627	0.626	0.626	0.626		
AC	0.053	0.073		0.063	0.063	0.063	0.063		
AD	0.240	0.260		0.250	0.249	0.254	0.253		
AE	1.375	1.395		1.386	1.388	1.386	1.385		
AF	0.115	0.135		0.130	0.130	0.130	0.131		
AG	0.240	0.280		0.260	0.260	0.260	0.266		
AH	0.240	0.260		0.255	0.254	0.254	0.257		
AI	2.000	2.020		2.001	2.002	2.000	2.000		
AJ	0.023	0.043		0.030	0.030	0.030	0.030		
Accept/Reject									

Measured by:	En
Date:	06/03/29

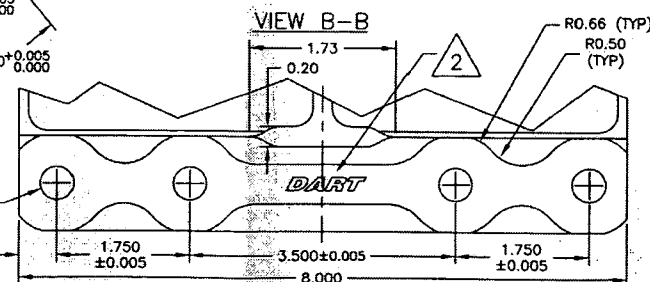
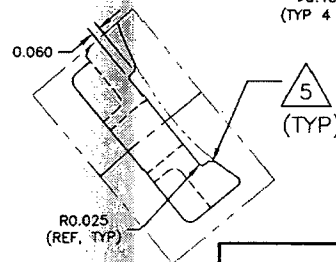
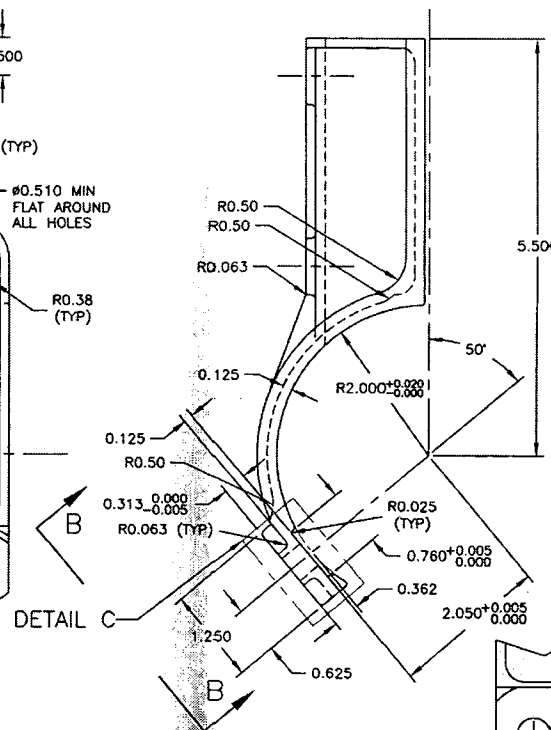
Audited by:	JML
Date:	06/03/29

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

05.12.06

MATERIAL: 7075-17351 (QQ-A-250/12) (REF DART SPEC. D6102-001)  
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1  
POWDER: COAT GLOSS WHITE (REF 4.3.5.1) PER DART  
QSI 005 4.3  
BREAK ALL SHARP EDGES 0.010 TO 0.020  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- $\triangle E$




E	05.07.13	ADD CHAMFER ON RIDGE, NOTE 5
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCRP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE

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DART AEROSPACE LTD.

DESIGN
CHECK
DATE
05.0

DRAWN BY	PH
APPROVED	

 <b>DART AEROSPACE LTD.</b> MARKHAM, ONTARIO, CANADA		REV 1000
DRAWING NO.		RE
D2571		SHEET 1
TITLE		SA
OUTER FWD SADDLE		

REV. 1  
T 1 OF  
SCALE  
2:1

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 35996

## Chris Provencal

---

**From:** David Shepherd [davids@dartaero.com]  
**Sent:** March 28, 2006 11:13 AM  
**To:** Chris Provencal  
**Subject:** Re: NCR D2571 saddle

Scrap the part. Too thin.

----- Original Message -----

**From:** "Chris Provencal" <cprovencal@dartaero.com>  
**To:** "David Shepherd (E-mail)" <davids@dartaero.com>  
**Sent:** Tuesday, March 28, 2006 9:00 AM  
**Subject:** NCR D2571 saddle

> David,  
>  
> One D2571 saddle:  
>  
> -The radius of the part mating with the skidtube should be R2.000"  
> +0.020/-0.000, the radius is R1.991"  
> -The wall of that section should be 0.125", it is 0.108"  
>  
> If they fix the radius so that its R2.000 to properly fit the skidtube,  
then  
> the wall thickness would end up being 0.108".  
>  
> I checked the SR and I don't see anything that addresses that section.  
>  
> Sincerely,  
> Chris Provencal  
> DART Aerospace Ltd.  
> Email..cprovencal@dartaero.com  
> Phone...613-632-3336  
> Fax.....613-632-4443  
>